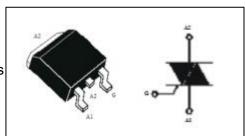


isc Triacs Q6016NH3

## **FEATURES**

- · With TO-263 non insulated package
- Suitables for general purpose AC switching, which can be used as an ON/OFF function in applications such as static relays heating regulation, induction motor starting circuits. Or for phase control operation in light dimmers, motor speed controllers etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL               | PARAMETER                                  | MIN     | UNIT                 |
|----------------------|--|---------|----------------------|
| $V_{DRM}$            | Repetitive peak off-state voltage          | 600     | V                    |
| $V_{RRM}$            | Repetitive peak off-state voltage          | 600     | V                    |
| I <sub>T(RMS)</sub>  | RMS on-state current (full sine wave)      | 16      | Α                    |
| I <sub>TSM</sub>     | Non-repetitive peak on-state current @60HZ | 200     | Α                    |
| T <sub>j</sub>       | Operating junction temperature             | 125     | $^{\circ}\mathbb{C}$ |
| T <sub>stg</sub>     | Storage temperature                        | -40~125 | $^{\circ}\mathbb{C}$ |
| R <sub>th(j-c)</sub> | Thermal resistance, junction to case       | 4.6     | °C/W                 |

## **ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)**

| SYMBOL           | PARAMETER                         |     | CONDITIONS  | MAX         | UNIT |
|------------------|-----------------------------------|-----|---|-------------|------|
| I <sub>RRM</sub> | Repetitive peak reverse current   |     | V <sub>R</sub> =V <sub>RRM</sub> ,<br>V <sub>R</sub> =V <sub>RRM</sub> , Tj=100 ℃ | 0.05<br>0.5 | mA   |
| I <sub>DRM</sub> | Repetitive peak off-state current |     | V <sub>R</sub> =V <sub>RRM</sub> ,<br>V <sub>R</sub> =V <sub>RRM</sub> , Tj=100°C | 0.05<br>0.5 | mA   |
| I <sub>GT</sub>  |                                   | I   | V <sub>D</sub> =12V   | 20          |      |
|                  | Gate trigger current              | II  |   | 20          | mA   |
|                  |                                   | III |   | 20          |      |
| I <sub>H</sub>   | Holding current                   |     | I <sub>GT</sub> = 0.5A, Gate Open   | 35          | mA   |
| V <sub>GT</sub>  | Gate trigger voltage all quadrant |     | V <sub>D</sub> =12V   | 1.5         | V    |
| V <sub>TM</sub>  | On-state voltage                  |     | I <sub>T</sub> = 22.5A; t <sub>p</sub> = 380 μ s                                  | 1.6         | V    |



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